

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A method of regulating the nonspecific adsorption of a molecule to a solid phase surface, comprising regulating the hydrophobic property of the solid phase surface in a solid phase carrier.

Claim 2 (Currently Amended): A method of suppressing the nonspecific interaction between a molecule A and/or a solid phase carrier and a molecule other than a molecule B that specifically interacts with said molecule A, comprising conducting a treatment to reduce the hydrophobic property of the solid phase surface in the solid phase carrier, in a process to immobilize the molecule A onto the solid phase carrier and analyze the specific interaction between the molecule A and the molecule B on the solid phase, or in a process to immobilize the molecule A onto the solid phase carrier and select the molecule B using the specific interaction between the molecule A and the molecule B on the solid phase.

Claim 3 (Canceled).

Claim 4 (Currently Amended): The method of claim 2, ~~claim 2 or 3~~, wherein the combination of the molecule A and the molecule B is any of a small compound and a small compound, a small compound and a large compound, and a large compound and a large compound.

Claim 5 (Currently Amended): The method of claim 2, ~~claim 2 or 3~~, wherein the combination of the molecule A and the molecule B is a small compound and a large compound or a large compound and a large compound.

Claim 6 (Currently Amended): The method of claim 2, ~~claim 2 or 3~~, wherein the treatment to reduce the hydrophobic property of the solid phase surface in the solid phase carrier is to introduce, at the time of immobilization of the molecule A onto the solid phase carrier, a hydrophilic spacer therebetween.

Claim 7 (Original): The method of claim 6, wherein the hydrophilic spacer has at least any of the following characteristics while in a state bound to the solid phase carrier and the molecule A:

- (i) the number of hydrogen bond acceptor is 6 or more,
- (ii) the number of hydrogen bond donor is 5 or more,
- (iii) the total number of hydrogen bond acceptor and hydrogen bond donor is 9 or more.

Claim 8 (Original): The method of claim 7, wherein said hydrophilic spacer further has one or more carbonyl groups in the molecule thereof.

Claim 9 (Currently Amended): The method of claim 7, ~~claim 7 or 8~~, further characterized in that said hydrophilic spacer does not have a functional group that becomes positively or negatively charged in an aqueous solution.

Claims 10-17 (Canceled).

Claim 18 (Original): A screening method for a molecule B that exhibits a specific interaction with a molecule A, comprising at least the following steps:

- (i) immobilizing the molecule A onto a solid phase carrier via a hydrophilic spacer,
- (ii) contacting a sample that contains or does not contain the molecule B with the solid phase carrier with the molecule A immobilized thereon obtained in (i) above,
- (iii) identifying and analyzing a molecule that has exhibited or has not exhibited a specific interaction with the molecule A, and
- (iv) judging a molecule that exhibits a specific interaction with the molecule A as the molecule B on the basis of the analytical results obtained in (iii) above.

Claim 19 (Original): The method of claim 18, wherein the combination of the molecule A and the molecule B is any of a small compound and a small compound, a small compound and a large compound, and a large compound and a large compound.

Claim 20 (Original): The method of claim 18, wherein the combination of the molecule A and the molecule B is a small compound and a large compound or a large compound and a large compound.

Claim 21 (Original): The method of claim 18, wherein the hydrophilic spacer has at least any of the following characteristics while in a state bound to the solid phase carrier and the molecule A:

- (i) the number of hydrogen bond acceptor is 6 or more,
- (ii) the number of hydrogen bond donor is 5 or more,
- (iii) the total number of hydrogen bond acceptor and hydrogen bond donor is 9 or more.

Claim 22 (Original): The method of claim 21, wherein said hydrophilic spacer further has one or more carbonyl groups in the molecule thereof.

Claim 23 (Currently Amended): The method of claim 21, ~~claim 21 or 22~~, further characterized in that said hydrophilic spacer does not have a functional group that becomes positively or negatively charged in an aqueous solution.

Claim 24 (Original): A hydrophilic spacer for reducing the hydrophobic property of the solid phase surface in a solid phase carrier, which has at least any of the following characteristics while in a state bound to the solid phase carrier and the molecule A:

- (i) the number of hydrogen bond acceptor is 6 or more,
- (ii) the number of hydrogen bond donor is 5 or more,
- (iii) the total number of hydrogen bond acceptor and hydrogen bond donor is 9 or more.

Claim 25 (Original): The hydrophilic spacer of claim 24, wherein said hydrophilic spacer further has one or more carbonyl groups in the molecule thereof.

Claim 26 (Currently Amended): The hydrophilic spacer of claim 24, ~~claim 24 or 25~~, further characterized in that said hydrophilic spacer does not have a functional group that becomes positively or negatively charged in an aqueous solution.

Claim 27 (Currently Amended): A complex that comprises a solid phase carrier and the hydrophilic spacer of claim 24, ~~any one of claims 24-26~~.

(In Formula (Ia),

A is an appropriate joining group,

X_1 - X_3 are the same or different and each is a single bond or a methylene group that may be substituted by a linear or branched alkyl group having 1-3 carbon atoms,

R_1 - R_7 are the same or different and each is a hydrogen atom, a linear or branched alkyl group having 1-3 carbon atoms, $-\text{CH}_2\text{OH}$ or a hydroxyl group,

m is an integer of 0-2, m' is an integer of 0-10, m'' is an integer of 0-2,

when a plurality of R_3 - R_7 units exist, they may be the same or different, when a plurality of X_3 units exist, they may be the same or different;

in Formula (Ib),

n and n' are the same or different and each is an integer of 1-1000;

in Formula (Ic),

p, p' and p'' are the same or different and each is an integer of 1-1000;

in Formula (Id),

X_4 is a single bond or a methylene group that may be substituted by a linear or branched alkyl group having 1-3 carbon atoms,

R_8 - R_{10} are the same or different and each is a hydrogen atom, a linear or branched alkyl group having 1-3 carbon atoms, $-\text{CH}_2\text{OH}$ or a hydroxyl group,

q is an integer of 1-7,

when a plurality of R_8 units exist, they may be the same or different, when a plurality of X_4 units exist, they may be the same or different;

in Formula (Ie),

R_{11} - R_{16} are the same or different and each is a hydrogen atom, a linear or branched alkyl group having 1-3 carbon atoms, $-\text{CH}_2\text{OH}$ or a hydroxyl group,

r is an integer of 1-10, r' is an integer of 1-50,

when a plurality of R_{11} - R_{16} units exist, they may be the same or different).

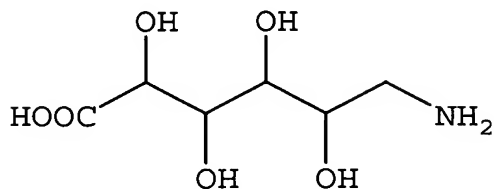
Claim 31 (Original): The hydrophilic spacer of claim 30, which has two or more partial structures represented by any one formula selected from the group consisting of Formulas (Ia)-(Ie).

Claim 32 (Currently Amended): A complex that comprises a solid phase carrier and the hydrophilic spacer of claim 30, ~~claim 30 or 31~~.

Claim 33 (Currently Amended): A complex that comprises the hydrophilic spacer of claim 30 ~~or 31~~ and a molecule A.

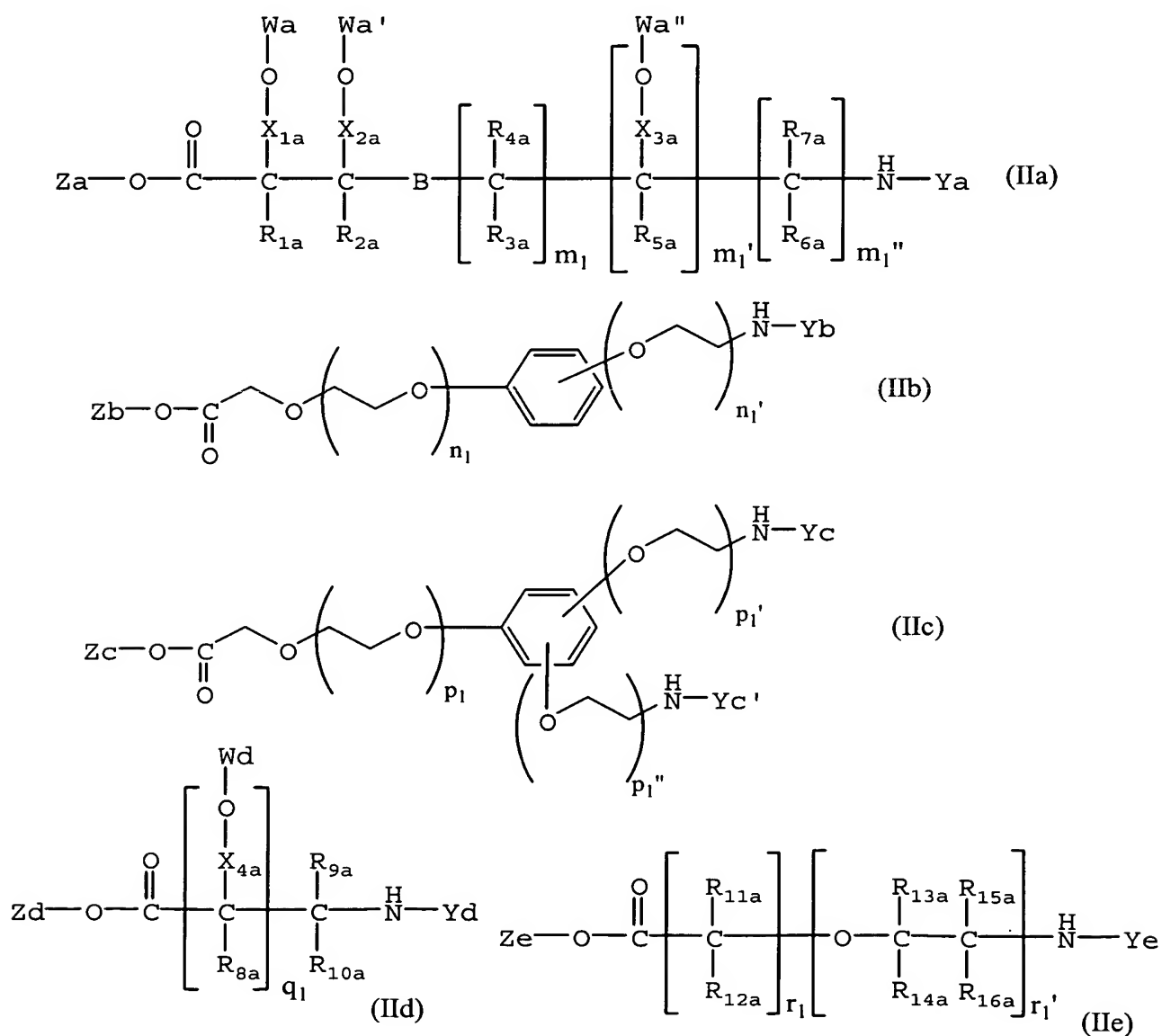
Claim 34 (Currently Amended): A complex that comprises a solid phase carrier, the hydrophilic spacer of claim 30, ~~claim 30 or 31~~, and a molecule A.

Claim 35 (Original): A compound that has at least one partial structure represented by any one formula selected from the group consisting of Formulas (Ia)-(Ie), but excluding the following compound:



Claim 36 (Original): The compound of claim 35, which has two or more partial structures represented by any one formula selected from the group consisting of Formulas (Ia)-(Ie).

Claim 37 (Original): A compound represented by at least one formula selected from the group consisting of Formulas (IIa)-(IIe) below:



(In Formula (IIa),

Y_a is a hydrogen atom or an amino-group-protecting group,

Z_a is a hydrogen atom or a carboxyl-group-protecting group,

W_a, W_a' and W_a'' are the same or different and each is a hydrogen atom or a hydroxyl-group-protecting group (these protective groups may bind together with mutually adjoining protective groups to form a dialkylmethylene group),

B is an appropriate joining group,

X_{1a}-X_{3a} are the same or different and each is a single bond or a methylene group that may be substituted by a linear or branched alkyl group having 1-3 carbon atoms,

R_{1a}-R_{7a} are the same or different and each is a hydrogen atom, a linear or branched alkyl group having 1-3 carbon atoms, -CH₂OH (in the formula, the hydroxyl group may be protected) or a hydroxyl group that may be protected,

m₁ is an integer of 0-2, m₁' is an integer of 0-10, m₁'' is an integer of 0-2,

when a plurality of R_{3a}-R_{7a} units exist, they may be the same or different, when a plurality of X_{3a} units exist, they may be the same or different;

in Formula (IIb),

Y_b is a hydrogen atom or an amino-group-protecting group,

Z_b is a hydrogen atom or a carboxyl-group-protecting group,

n₁ and n₁' are the same or different and each is an integer of 1-1000;

in Formula (IIc),

Y_c and Y_c' are the same or different and each is a hydrogen atom or an amino-group-protecting group,

Z_c is a hydrogen atom or a carboxyl-group-protecting group,

p₁, p₁' and p₁'' are the same or different and each is an integer of 1-1000;

in Formula (IId),

Y_d is a hydrogen atom or an amino-group-protecting group,

Zd is a hydrogen atom or a carboxyl-group-protecting group,

Wd is a hydrogen atom or a hydroxyl group-protecting group,

X_{4a} is a single bond or a methylene group that may be substituted by a linear or branched alkyl group having 1-3 carbon atoms,

R_{8a}-R_{10a} are the same or different and each is a hydrogen atom, a linear or branched alkyl group having 1-3 carbon atoms, -CH₂OH (in the formula, the hydroxyl group may be protected) or a hydroxyl group that may be protected,

q₁ is an integer of 1-7,

when a plurality of R_{8a} units exist, they may be the same or different, when a plurality of X_{4a} units exist, they may be the same or different;

in Formula (IIe),

Ye is a hydrogen atom or an amino-group-protecting group,

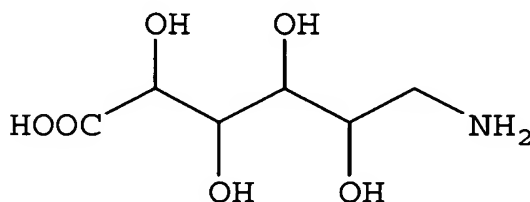
Ze is a hydrogen atom or a carboxyl-group-protecting group,

R_{11a}-R_{16a} are the same or different and each is a hydrogen atom, a linear or branched alkyl group having 1-3 carbon atoms, -CH₂OH (in the formula, the hydroxyl group may be protected), or a hydroxyl group that may be protected,

r₁ is an integer of 1-10, r₁' is an integer of 1-50,

when a plurality of R_{11a}-R_{16a} units exist, they may be the same or different),

but excluding the following compound:



Claim 38 (Original): A polymer compound prepared by polymerizing a compound represented by at least one formula selected from the group consisting of Formulas (IIa)-(IIe).

Claim 39 (Currently Amended): A complex that comprises a solid phase carrier and the compound of claim 35, ~~any one of claims 35-38~~.

Claim 40 (Currently Amended): A complex that comprises the compound of claim 35 ~~any one of claims 35-38~~ and a molecule A.

Claim 41 (Currently Amended): A complex that comprises a solid phase carrier, the compound of claim 35, ~~any one of claims 35-38~~, and a molecule A.